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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. **HSJ920030267US1**First Inventor **Prakash Kasiraj**

Title

CURRENT-PERPENDICULAR-TO-PLANE MAGNETORESISTIVE SENSOR WITH FREE LAYER
STABILIZED AGAINST VORTEX MAGNETIC DOMAINS GENERATED BY THE SENSE CURRENTExpress Mail Label No. **EL 995203155 US****APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **17**]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **2**]
5. Oath or Declaration [Total Pages **2**]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____ / _____

Prior application information:

Examiner: _____

Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS☐ Customer Number or Bar Code Label

(Insert Customer No. or Attach bar code label here)

or ☒ Correspondence address below

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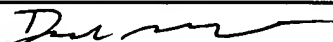
Name (Print/Type)

Douglas R. Millett

Registration No. (Attorney/Agent)

31,784

Signature



Date

2/10/04

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14023
021004
U.S. PTO

PTO/SB/17 (10-01)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 810.00

Complete if Known

Application Number	
Filing Date	
First Named Inventor	Prakash Kasiraj
Examiner Name	
Group Art Unit	
Attorney Docket No.	HSJ920030267US1

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number: 502587
- Deposit Account Name: Hitachi Global Storage Technologies
- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
- ☐ Applicant claims small entity status. See 37 CFR 1.27
2. ☐ Payment Enclosed:
- ☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	2001	770	385			Utility filing fee	770.00
1002	2002	340	170			Design filing fee	
1003	2003	530	265			Plant filing fee	
1004	2004	770	385			Reissue filing fee	
1005	2005	160	80			Provisional filing fee	

SUBTOTAL (1) (\$) 770.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
17	-20** = 0	18.00	0.00
3	-3** = 0	86.00	0.00
Multiple Dependent			

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	2202	18	9			Claims in excess of 20
1201	2201	86	43			Independent claims in excess of 3
1203	2203	290	145			Multiple dependent claim, if not paid
1204	2204	86	43			** Reissue independent claims over original patent
1205	2205	18	9			** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	205	130	65			Surcharge - late filing fee or oath	
1052	227	50	25			Surcharge - late provisional filing fee or cover sheet	
1053	139	130	130			Non-English specification	
1812	2,520	147	2,520			For filing a request for ex parte reexamination	
1804	920*	112	920*			Requesting publication of SIR prior to Examiner action	
1805	1,840*	113	1,840*			Requesting publication of SIR after Examiner action	
1251	215	110	55			Extension for reply within first month	
1252	216	420	205			Extension for reply within second month	
1253	217	950	465			Extension for reply within third month	
1254	218	1,480	725			Extension for reply within fourth month	
1255	228	2,010	985			Extension for reply within fifth month	
1401	219	330	160			Notice of Appeal	
1402	220	330	160			Filing a brief in support of an appeal	
1403	221	290	140			Request for oral hearing	
1451	138	1,510	1,510			Petition to institute a public use proceeding	
1452	240	110	55			Petition to revive - unavoidable	
1453	241	1,330	650			Petition to revive - unintentional	
1501	242	1,330	650			Utility issue fee (or reissue)	
1502	243	480	235			Design issue fee	
1503	244	640	310			Plant issue fee	
1460	122	130	130			Petitions to the Commissioner	
1807	123	50	50			Processing fee under 37 CFR 1.17(q)	
1806	126	180	180			Submission of Information Disclosure Stmt	
8021	581	40	40			Recording each patent assignment per property (times number of properties)	40
1809	246	770	370			Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	249	770	370			For each additional invention to be examined (37 CFR § 1.129(b))	
1801	279	770	375			Request for Continued Examination (RCE)	
1802	169	900	900			Request for expedited examination of a design application	
Other fee (specify)							
*Reduced by Basic Filing Fee Paid							
SUBTOTAL (3) (\$) 40.00							

SUBMITTED BY

Name (Print/Type)	Douglas R. Millett	Registration No. (Attorney/Agent)	31,784	Telephone	(408) 717-5491
Signature		Date	2/10/04		

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APPLICATION DATA SHEET

DOCKET NO

TITLE

EXP MAIL LABEL NO

MAIL DATE (mm/dd/yy)

PAGES OF SPEC

DWG SHEETS

TOT CLMS

EXTRA (TOT - 20)

IND CLMS

EXTRA (IND - 3)

ATTY-AGENT

REG NO -- PHONE NO

NO OF PGS IN DECLARATION -- LAST DATE SIGNED (MM/DD/YY)

LAST DATE ASSIGNMENT SIGNED (MM/DD/YY)

EXPRESS MAIL CERTIFICATE

I hereby certify that the above paper/fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to the Commissioner for Patents and Trademarks, Alexandria, VA 22313-1450.

"Express Mail" no.: EL995203155

Date of Deposit: 02/10/04

Person mailing paper/fee: Mary Lou Domenici

Signature 